

## **FACILITY DESIGN PLAN**

### **Dakota Dome Renovation – Phase 2: Interior Renovations**

#### **THE UNIVERSITY OF SOUTH DAKOTA**

##### **Introduction:**

The Facility Program Plan for the Dakota Dome Renovation was approved by the board in December 2017.

The Dakota Dome Renovation is split into two phases. The first phase is the Outdoor Football Practice Field, which the building committee and Board of Regents has already approved at a total cost of \$2,115,000. The second phase will be an Interior Renovation of the spaces primarily on the west side of the Dakota Dome.

The Interior Renovations at the west side of the Dakota Dome will provide upgrades to plumbing, mechanical, and electrical systems. It will include a new fire protection system and fire alarm system. The project will include new LED field lighting, new sound system, and new electrical service and lighting throughout the west side spaces. The project will incorporate new football locker rooms and lounge spaces at the west side, new restrooms, concessions, commercial kitchen, two new entrances from the west side, football coaches offices, football meeting rooms, and new suites and loge boxes for a premium seating area incorporated at approx. 8'-0" above the playing surface. The project will add a new elevator and will add ADA seating and access to the west side of the Dakota Dome. The project will include all new precast stadia structure to the west side for new fixed back seating, adding approx. 4,300 seats to the west side of the Dakota Dome. These renovations will update the facility to meet current ADA, International Building Code, and Fire Code requirements.

##### **a. Architectural, mechanical, and electrical schematic design:**

The renovation will include new football locker rooms, football lounge spaces at the 100 level. New suites and loge boxes at the 200 level. A west side concourse with restrooms, concessions, commercial kitchen, and two new entrances from the west side of the Dome at the 300 level. The project will build a new 400 level, which will house football coaches/staff offices, football meeting rooms for the players and coaches, and new restrooms at that level. The project will also incorporate a new 500 level, which will be used as a large open club area for now, until a future project that would add additional suites at this level. The project will include all new precast stadia seating at the west side, with fixed back seats. This will add approximately 4,300 additional seats to the west side of the Dakota Dome. Finally, the project will

incorporate new fire protection and fire alarm systems at the west side, new plumbing and HVAC systems at the west side, a new sound system for the playing field, and new west side electrical systems, including new energy efficient LED field lighting.

**Mechanical systems:**

The project will remove the existing two (2) air handlers on the west side of the building and install four (4) new, energy efficient air handlers that will serve the entire west side along with the main bowl of the Dome. The project will also replace the existing chiller on the west side and install a new, more energy efficient chiller. The project will incorporate Variable Air Volume (VAV) boxes for individual controls of the heating/cooling systems within each area/room. Finally, the project will incorporate all new Building Automation System (BAS) for controls of the heating, cooling, and lighting systems within the building via the campus wide BAS system.

**Electrical systems:**

The project will incorporate new electrical service for the west side of the Dome. It will also incorporate new energy efficient LED lighting systems at all areas on the west side of the Dome, including new LED athletic field lighting. The project will incorporate occupancy sensors, new electrical panels, breakers, wiring, switching, etc.

**b. Changes from Facility Program Plan:**

The only change is that this is a phased project, with the first phase of the project being the outdoor football practice field (Previously approved by the Building Committee and the Board of Regents) and the second phase being the indoor renovations (mainly at the west side) to the Dakota Dome.

**c. Impact to existing building or campus-wide heating/cooling/electrical systems:**

The Dakota Dome interior renovation will not affect the campus-wide heating system as it will utilize its own heating source and won't be tied to the campus steam system. The project will affect the overall heating and cooling costs for the campus, but due to more efficient equipment, USD is expecting these costs to be minimal. The electrical systems will incorporate LED lighting, occupancy sensors, etc. making the electrical systems more efficient and therefore USD is anticipating these costs to remain the same or improve.

**d. Total project cost estimate:**

The overall Dakota Dome Renovation project cost is \$26,320,000. Phase 1: Outdoor Practice Football Field project cost is \$2,115,000 (Previously approved by Building Committee and Board of Regents). Phase 2: Interior Renovation project cost is \$24,205,000. The following presents the breakdown of the cost estimate for Phase 2.

\Total Estimate Of Probable Construction Costs	\$20,500,000
AV/IT	\$800,000
FF&E	\$500,000
A & E Fee	\$1,440,000
Commissioning	\$87,700
Testing/LEED	\$80,000
OSE/USD Fees	\$275,000
Owner's Contingency:	\$522,300
<b>PROJECT TOTAL</b>	<b>\$24,205,000</b>

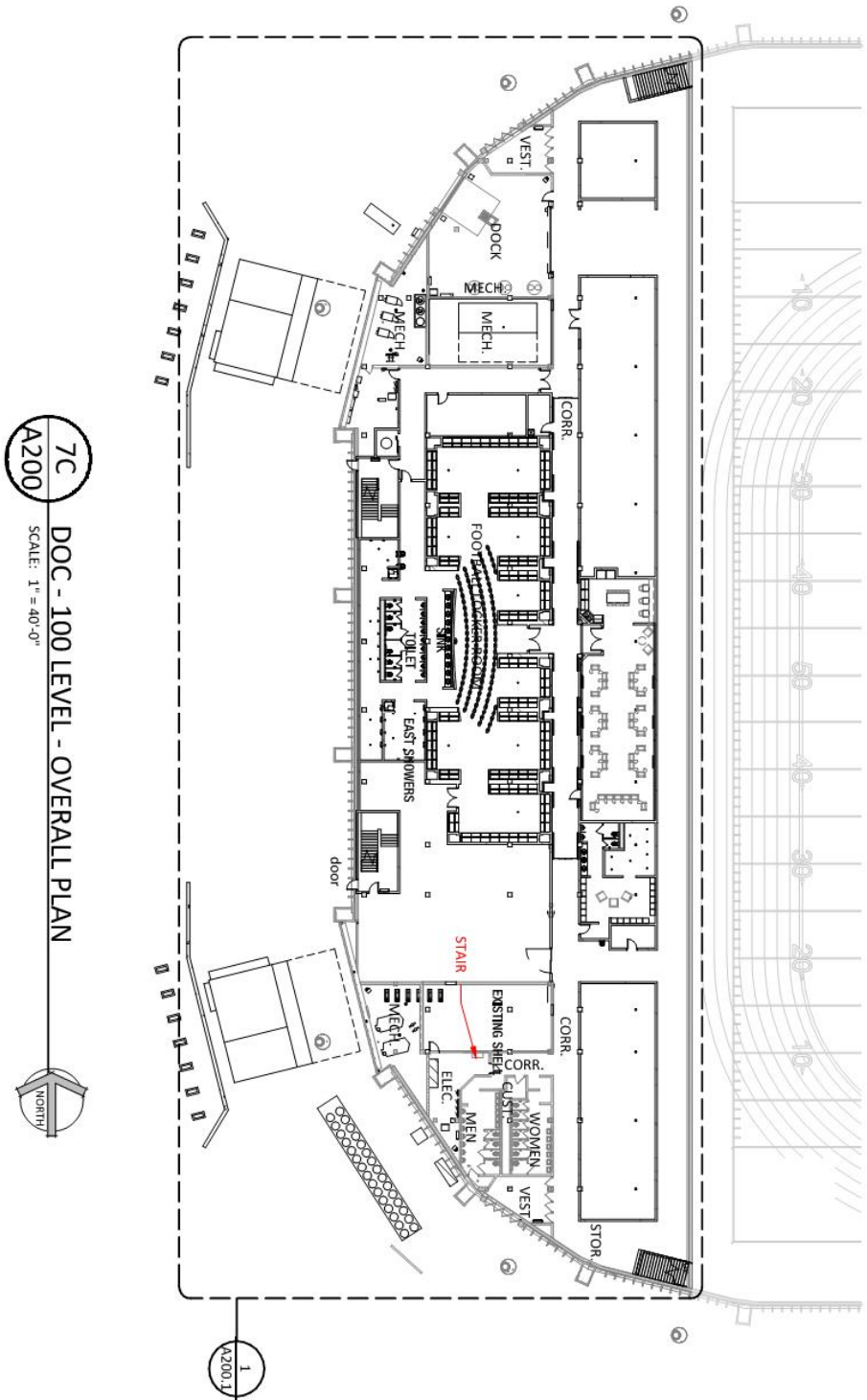
<b>FUNDING FOR THE PROJECT</b>	<b>Facility Design Plan March 2018</b>
Private donations	\$14,500,000
USD local other funds	\$6,419,602
HEFF M&R Proceeds	\$5,400,398
<b>Total</b>	<b>\$26,320,000</b>

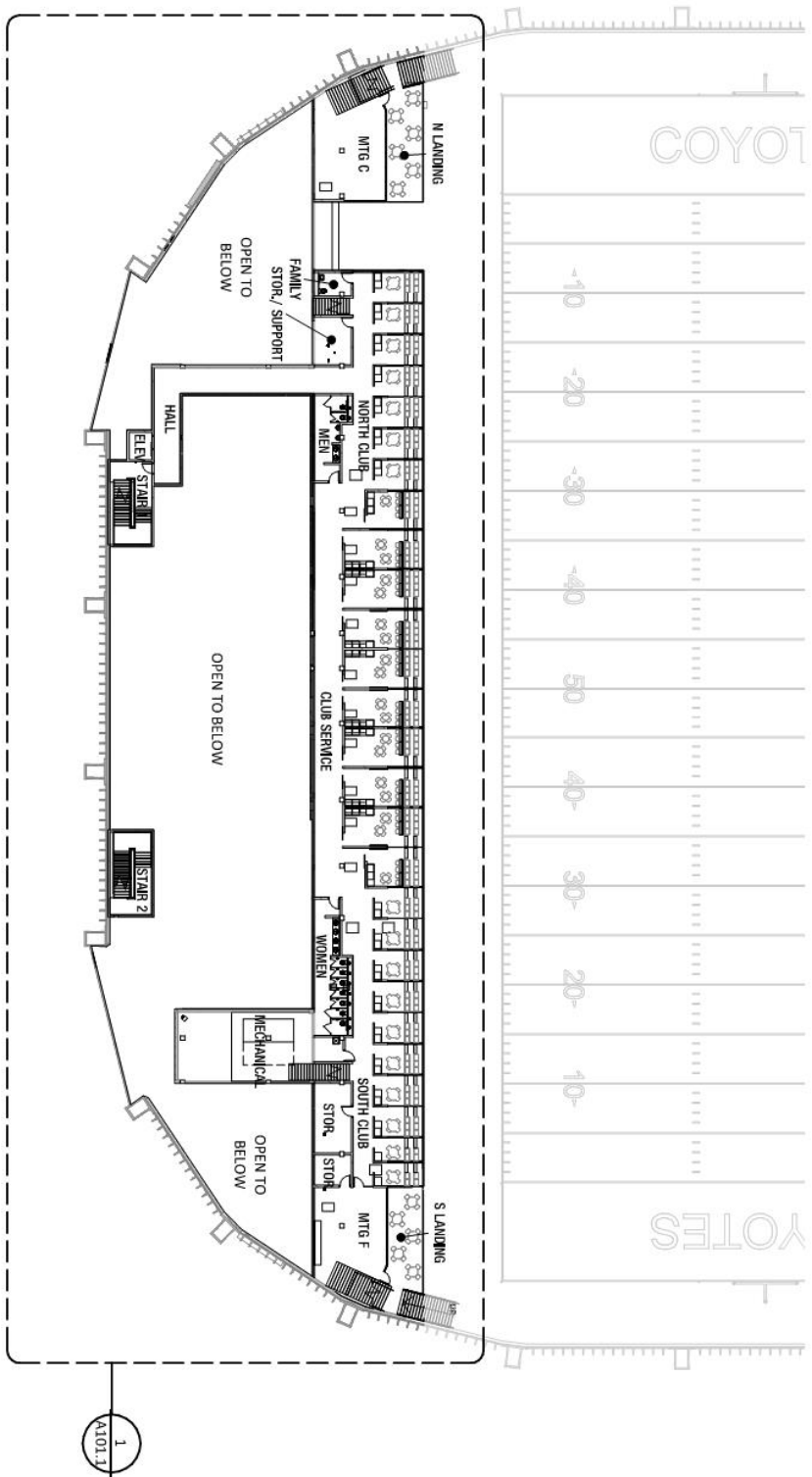
**e. Changes from cost estimate for operational or M&R expenses:**

There are no changes from Facility Program Plan

**Attachments:**

See following pages

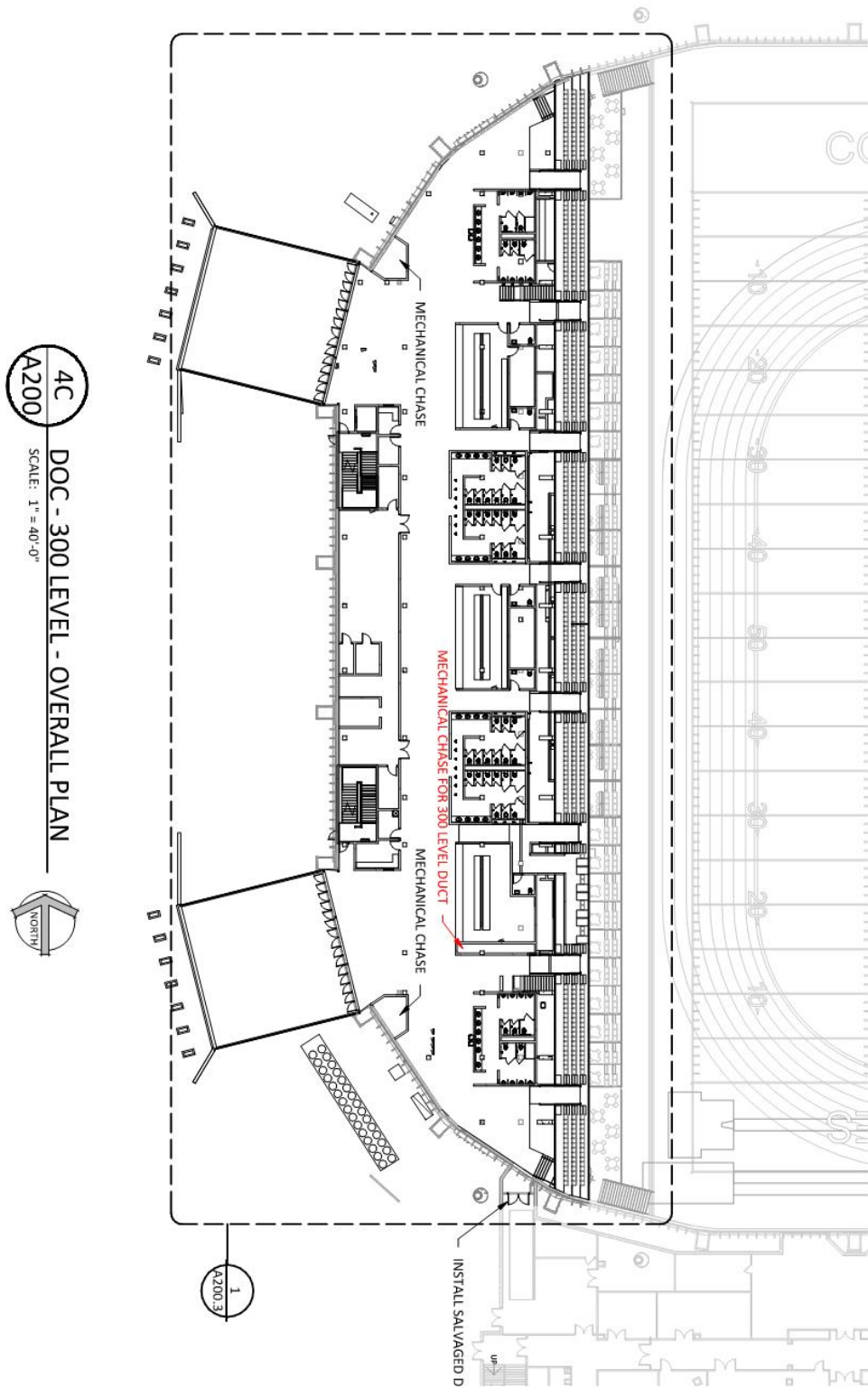




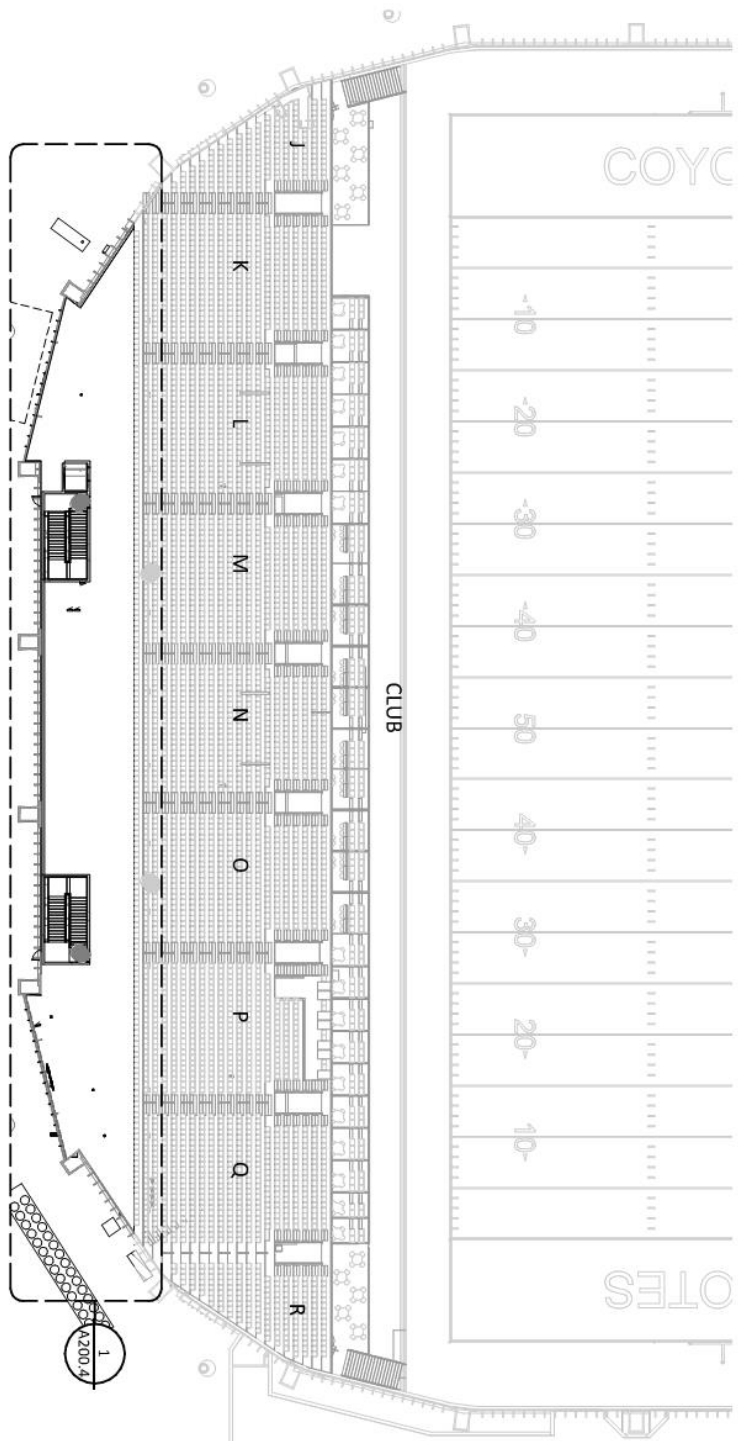
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DOC - 200 LEVEL OVERALL  
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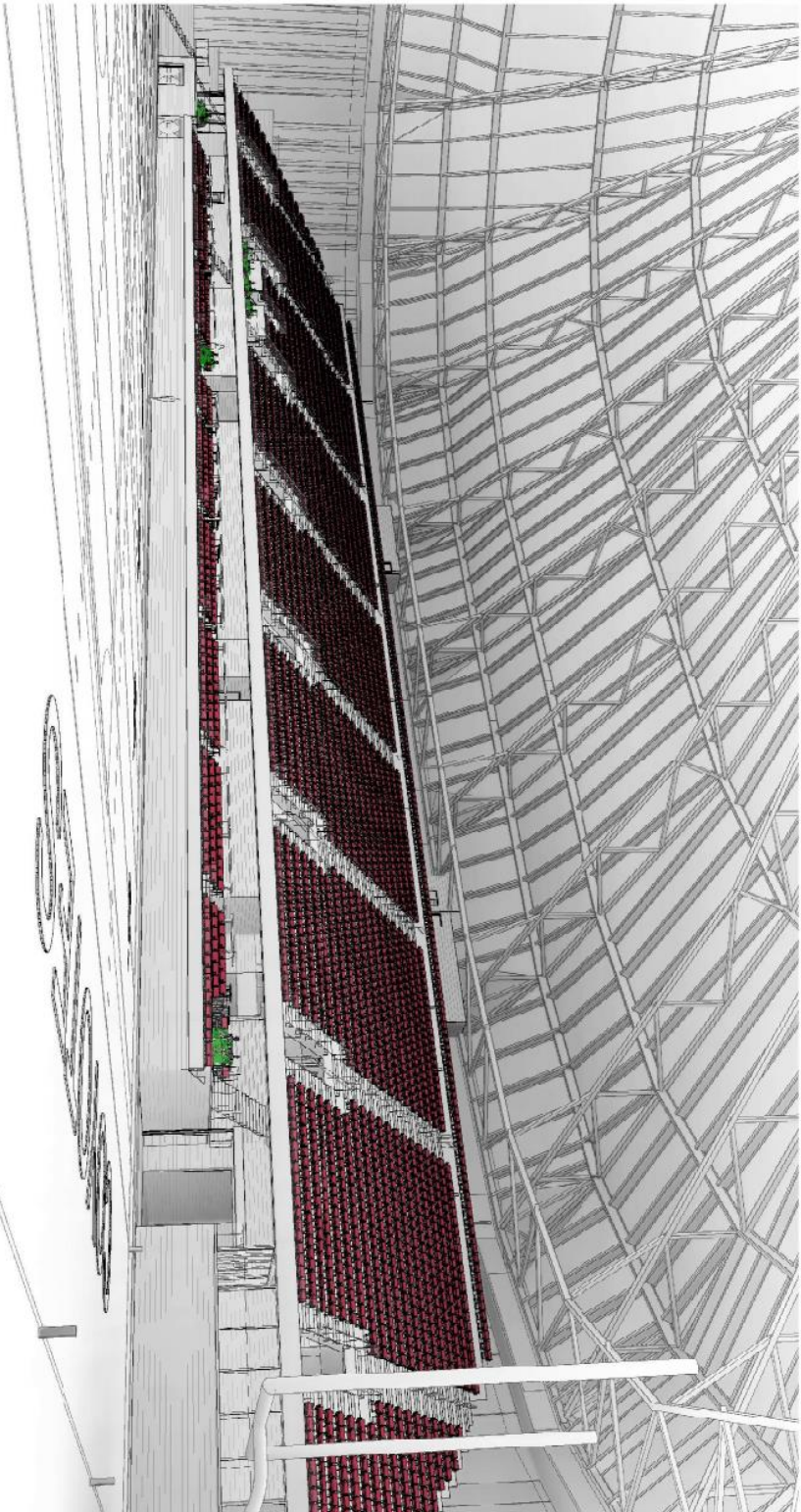


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DOC - 500 LEVEL - OVERALL PLAN  
SCALE: 1" = 40'-0"







# USD DAKOTA DOME RENOVATION

SD SUBMITTAL

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